Christine

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION I – General Information

Section I shall be completed by all permit applicants. Instructions for completing Section I, Pages 1 and 2, are on Page 2 of the Appendix. To submit additional information, see Page ii, Item 3.

Water Resources Division Use Only	Cashier Use Only: 6000-42203-9512-481000-00
Receipt #: 14-26428	
Permit ID #: 105307.1	

PLEASE TYPE OR PRINT

1. NPDES PERMIT NUMBER: MI0001848

2. APPLICANT

Applicant Name: DTE Electric Company		
Address: One Energy Plaza	Address 2 or P.O. Box: Room 655 G.O.	
City: Detroit	State: Michigan	ZIP Code: 48226
Telephone (with area code): (313) 235-5569	FAX (with area code): (313)-235-5018	Applicant Web Site Address: www.dteenergy.com

3. FACILITY

Facility Name 1: Monroe Power Plant		
Facility Name 2:		
Facility Name 3:		
Street Address (Do not use a P.O. Box Number): 3500 Front Street		
City: Monroe	State: Michigan	ZIP Code: 48161
Telephone (with area code): (734) 384-2207	FAX (with area code): (734) 384-2100	Facility Web Site Address:

4. CONTACTS

☒ Application Contact ☐ Facility Contact ☐ Discharge Monitoring Reports ☒ Storm Water Billing ☐ Biosolids Billing ☒ NPDES Annual Billing	First Name: Nicholas	Last Name: Chuey	
	Title: Senior Engineer - Environmental	Business: DTE Energy Corporate Services, LLC	
	Address 1: One Energy Plaza	Address 2: Room 655 G.O.	
	City: Detroit	State: Michigan	ZIP Code: 48226
	Telephone (with area code): (313) 235-5569	Fax Number: (313) 235-5018	e-mail address: chueyn@dteenergy.com
☐ Application Contact ☒ Facility Contact ☐ Discharge Monitoring Reports ☐ Storm Water Billing ☐ Biosolids Billing ☐ NPDES Annual Billing	First Name: Inderpal	Last Name: Deol	
	Title: Plant Manager	Business: DTE Electric Company - Monroe Power Plant	
	Address 1: 3500 Front Street	Address 2:	
	City: Monroe	State: Michigan	ZIP Code: 48161
	Telephone (with area code): (734) 384-2207	Fax Number: (734) 384-2100	e-mail address: deoli@dteenergy.com
☐ Application Contact ☐ Facility Contact ☒ Discharge Monitoring Reports ☐ Storm Water Billing ☐ Biosolids Billing ☐ NPDES Annual Billing	First Name: Atira	Last Name: Mabin	
	Title: Staff Engineer - Environmental	Business: DTE Energy Corporate Services, LLC	
	Address 1: 3500 Front Street	Address 2:	
	City: Monroe	State: Michigan	ZIP Code: 48161
	Telephone (with area code): (734) 384-2559	Fax Number:	e-mail address: mabina@dteenergy.com

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Monroe Power Plant	MI0001848

5. PERMIT ACTION REQUESTED (Check one box only). Instructions for this item are on Page 2 of the Appendix.

- ☐ **NEW USE.** A proposed discharge.
- ☐ **EXISTING DISCHARGE** that is currently unpermitted.
- ☒ **REISSUANCE** of current permit.
- ☐ **MODIFICATION** of current permit. Attach a description of the proposed modification.

Note: Applications for **New Use** discharges, **Existing Discharges** that are currently unpermitted, and for either **Reissuance** or **Modification** that include an increased loading of pollutants to the receiving water are required to submit a Rule 98 Demonstration with the Application. See Item 6.

6. RULE 98 – ANTIDEGRADATION REQUIREMENTS. Instructions for this item are on Page 2 of the Appendix.

In accordance with Rule 323.1098 of the Michigan Water Quality Standards, the applicant is required to submit an Antidegradation Demonstration for any new or increased loading of pollutants to the surface waters of the state. An Antidegradation Demonstration must contain the information specified in Rule 1098, outlined on Pages 8-9 of the Appendix. For assistance in completing this item, contact the Permits Section.

Will this discharge be an increased loading of pollutants to the surface waters of the state? ☐ Yes, continue below. ☒ No.

☐ Antidegradation Demonstration provided. ☐ Increased loading of pollutants is exempt from Antidegradation Demonstration as indicated below:

- ☐ A short-term (weeks to months) or temporary lowering of water quality
- ☐ Bypasses that are not prohibited by regulations set forth in 40 CFR 122.41(m)
- ☐ Response actions undertaken to alleviate a release of pollutants into the environment that may pose an imminent and substantial danger to the public health or welfare
- ☐ Discharges of pollutant quantities from the intake water at a facility if the intake and discharge are to the same body of water
- ☐ Increases in flow at a POTW if the increase is within the design flow of the facility, there is no increased loading of BCCs that are not specifically limited in the current permit, and there is no significant change expected in the charactenstics of the wastewater collected
- ☐ Intermittent increased loading related to wet-weather conditions
- ☐ New or increased loading due to DEQ-approved controls related to wet-weather conditions
- ☐ Discharges authorized by Certificates of Coverage (COC) and Notices of Coverage
- ☐ Increased loadings within the authorized levels of a limit in an existing control document, except those loadings that result from actions by the permittee that would otherwise require submittal of an increased use request
- ☐ Increased loadings of a pollutant which do not involve Bioaccumulative Chemicals of Concern and which use less than 10 percent of the unused loading capacity that exists at the time of the request

7. ADDITIONAL FACILITY LOCATION INFORMATION. Instructions for this item are on Page 2 of the Appendix.

A	Local Unit of Government (LUG): City of Monroe				LUG e-mail address	
B	County: Monroe				Township: Frenchtown	
C.	Town: T7S	Range: R9E	Section: 15	¼	¼, ¼	Private (French) Land Claim
D.	Latitude: 41 deg. 53' 30"				Longitude: 83 deg. 20' 45"	

8. CERTIFIED OPERATOR

Does the facility have a DEQ-certified operator? ☒ Yes ☐ No Instructions for this item are on Page 2 of the Appendix.

First Name: Arnell		Last Name: Smith	
Certification Number: W-6275		Certification Classification(s): A1b, A1d, A1h, A2b, B1b, B2a, B2c	
Address 1: 3500 Front Street		Address 2:	
City: Monroe		State: Michigan	Zip Code: 48161
Telephone Number: (734) 384-2235	Fax Number: (734) 384-2237	e-mail address: smithaj@dteenergy.com	

DTE Electric Company
One Energy Plaza, Detroit, MI 48226

DTE Energy

April 4, 2014

Michigan Department of Environmental Quality
Cashier's Office
WRD – NP1
5th Floor South, Constitution Hall
525 West Allegan
Lansing, Michigan 48933

Re: Application for Reissuance of NPDES Permit
DTE Electric Company - Monroe Power Plant
NPDES Permit No. MI0001848

Dear Madam or Sir:

In accordance with the Michigan Department of Environmental Quality Authorization to Discharge under NPDES Permit No. MI0001848, the DTE Electric Company is submitting the enclosed application for the reissuance. Also enclosed is the associated $750.00 application fee.

The Company would appreciate your expeditious review of this application and an acknowledgement of its receipt and administrative completeness as soon as practical.

If you have any questions relative to this application or desire additional information, please contact me at (313) 235-5569 or via e-mail at chueyn@dteenergy.com.

Sincerely,
DTE Energy Corporate Services, LLC

Nicholas J. Chuey

Nicholas J. Chuey
Senior Environmental Engineer
Environmental Management & Resources

Enclosures

Michigan Department of Environmental Quality – Water Resources Division

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9. OTHER ENVIRONMENTAL PERMITS

Provide the information requested below for any other federal, state, or local environmental permits in effect or applied for at the time of submittal of this Application, including, but not limited to, permits issued under any of the following programs: Air Pollution Control, Hazardous Waste Management, Wetlands Protection, Soil Erosion and Sedimentation Control, and other NPDES permits. To submit additional information, see Page ii, Item 3.

Issuing Agency	Permit or COC Number	Permit Type
MDEQ, Air Quality Division	MI-ROP-B2816-2009a MI-PTI-B2816-2009a	Renewable Operating Permit Source-Wide Permit to Install
MDEQ - Waste Management Division	9201	Solid Waste Mgmt License
MDEQ - Waste Management Division	MID092175074	ID Number for Waste Disposal

10. WATER FLOW DIAGRAM AND NARRATIVE DESCRIPTION

Provide a flow diagram **(using 8½" x 11" paper if possible)** and a narrative description that explains the diagram. The diagram should show the wastewater flow through the facility (from intake through discharge), including all processes, treatment units, including any lagoons or ponds (lagoon / pond construction and liner information should be included) used for wastewater treatment or storage (identify treatment units that operate intermittently), and bypass piping. Show all operations contributing wastewater and the locations of flow meters, chemical feeds, and monitoring and discharge points. The water balance shall show the daily average flow rates at the intake and discharge points, and approximate daily flow rates between treatment units, including influent and treatment rates. Use actual measurements whenever available, otherwise use the best estimate. Show all significant losses of water to products, atmosphere, and discharge. In addition, provide a flow diagram for any storm water discharges from secondary structures that are required by state or federal law and for storm water runoff from any Site of Environmental Contamination, pursuant to Part 201 of the Michigan Act. **Do not send blueprints. Provide black-and-white reproducible diagrams.**

Municipal Facilities – Include a narrative that briefly describes the history of the wastewater treatment facility and collection system, including the initial construction, facility improvements, future plans for upgrade, location of all constructed emergency overflows, and other pertinent information.

Industrial and Commercial Facilities – The diagram shall include all operations contributing wastewater, including process and production areas, sanitary flows, cooling water, and storm water runoff. **Include a narrative** that provides a brief description of the nature of the business and the manufacturing processes.

ATTACH THIS INFORMATION TO THIS APPLICATION. PLEASE DO NOT BIND THIS INFORMATION. Comments:

11. MAP OF FACILITY AND DISCHARGE LOCATION

Provide a detailed black-and-white reproducible map on 8½" x 11" paper showing the location of the existing or proposed facility, wastewater and biosolids treatment system(s), water intakes, wastewater monitoring, and wastewater discharge points into receiving waters (including bypasses). Include the exact location of the water intakes, wastewater monitoring and discharge point(s) and, if applicable, all areas through which the discharge flows (e.g., wetlands, open drains, storm sewers) between the discharge point and the receiving water. If the discharge is to a storm sewer, label the storm sewer and show its flow path to the receiving water. Also include the location of any water supply intakes or wells and groundwater monitoring wells. This map shall be a United States Geological Survey quadrangle (7.5 minute series) or other map of comparable detail, scale, and quality (which shows surface water bodies, roads, bathing beaches, and other pertinent landmarks). **It is preferred that the minimum area this map shall encompass be approximately one (1) mile beyond the property boundaries.**

ATTACH THIS INFORMATION TO THIS APPLICATION. Comments:

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION I – General Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER
Monroe Power Plant	MI0001848

12. CONTRACT LABORATORIES THAT PROVIDE ANALYTICAL SUPPORT

Provide the name and address of each contract laboratory or consulting firm that performed any analyses submitted as part of this Application. To submit additional information, see Page ii, Item 3.

Laboratory Name: TriMatrix Laboratories, Inc.			Laboratory Name		
Street Address: 5560 Corporate Exchange Court SE			Street Address		
City: Grand Rapids	State: Michigan	ZIP Code: 49512	City	State	ZIP Code
Telephone (with area code): (616) 975-4500	Fax (with area code): (616) 942-7463		Telephone (with area code)	Fax (with area code)	
Analysis Performed: SEE ATTACHED ANALYSES ON ATT. IV			Analysis Performed		
Laboratory Name			Laboratory Name		
Street Address			Street Address		
City	State	ZIP Code	City	State	ZIP Code
Telephone (with area code)	Fax (with area code)		Telephone (with area code)	Fax (with area code)	
Analysis Performed			Analysis Performed		

13. LIST ADJACENT PROPERTY OWNERS

List the names and mailing addresses of all property owners for all properties adjacent to the facility, treatment systems, and discharge locations. For vacant lots or empty buildings, supply the owner's mailing address – NOT the lot or building property address. To submit additional information, see Page ii, Item 3.

Name	Address	City	State	ZIP Code
See Attachment V				

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION I – General Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER
Monroe Power Plant	[redacted] MI0001848

14. APPLICATION CERTIFICATION

Rule 323.2114(1-4), promulgated under the Michigan Act, requires that this Application must be signed as follows:

A. For an organization, company, corporation, or authority, by a principal executive office, vice president, or higher
B. For a partnership, by a general partner
C. For a sole proprietor, by the proprietor
D. For a municipal, state, or other public facility, by a principal executive officer or ranking elected official (e.g., mayor, village president, city or village manager, or clerk)

Note: If the signatory is not listed above, but is authorized to sign the Application, please provide documentation of that authorization.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for having knowledge of violations."

The last Application for this facility was submitted on: April 2, 2009

I understand that my signature constitutes a legal agreement to comply with the requirements of the NPDES Permit. I certify under penalty of law that I possess full authority on behalf of the legal owner/permittee to sign and submit this Application.

Print Name: Inderpal K. Deol Title: Plant Manager

Signature: Inderpal K. Deol Date: 4/3/2014

This completes Section I. Publicly-Owned Treatment Works discharging sanitary and industrial wastewater to the surface waters, and privately-owned treatment works discharging sanitary wastewater to the surface waters should complete Section II. Privately-owned treatment works include, but are not limited to, Mobile Home Parks, Campgrounds, Condominiums, Hotels and Motels, and Nursing Homes. All other applicants should complete Section III. If assistance is needed to complete this Application, contact the Permits Section.

Permit Application Submittal Checklist

Please confirm the following before submitting the Application:

- ☒ 1. Section I has been completed, including all diagrams, maps, and the treatment process narrative.
- ☒ 2. The Application has been signed as required above in Section I.14.A.-D. or a copy of the letter authorizing the signatory to sign the letter has been included, as appropriate.
- ☒ 3. Section II or Section III has been completed, including any additional information or submissions.
- ☒ 4. Section IV has been completed by any facility that discharges storm water.
- ☐ 5. Section V has been completed by any facility that is a Concentrated Animal Feeding Operation.
- ☒ 6. Section VI has been completed by any facility that has Cooling Water Intake Structures.
- ☒ 7. A check or money order for the appropriate application fee has been made out to the "State of Michigan" and has been included with the Application submittal.
- ☒ 8. E-mail addresses have been provided.

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

Section III is to be completed by all facilities classified as Industrial or Commercial facilities. Industrial and Commercial facilities include, but are not limited to, facilities that discharge or propose to discharge a wastewater generated by a production process, a service provided, or through a remediation project. Municipal and public facilities are not required to complete Section III (unless requesting authorization for discharges other than sanitary wastewater).

A. Facility Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER
Monroe Power Plant	MI0001848

1. BUSINESS INFORMATION

A. Provide up to four Standard Industrial Classification (SIC) or North American Industry Classification System (NAICS) codes, in order of economic importance, which best describe the major products or services provided by this facility

1.	2.	3.	4.
4911			

B. Indicate if this facility is a primary industry (refer to Table 1 of the Appendix to determine if this facility is a primary industry).

☒ Yes. This facility is a primary industry. Indicate the primary industry as identified in Table 1 of the Appendix: Steam Electric Power Plants

☐ No. This facility is not a primary industry

2. WATER SUPPLY AND DISCHARGE TYPE

A. Identify all water sources entering the facility and treatment systems, and provide average flows. The volume may be estimated from water supply meter readings, pump capacities, etc. Provide the name of the source where appropriate (i.e., Grand River, Lake Michigan, City of, Millpond). To submit additional information, see Page ii, Item 3.

	Name and Location of Source	Average Volume or Flow Rate	Units
Municipal Supply	City of Monroe	1.0	MGD
Surface Water Intake	River Raisin, Lake Erie	1,550	MGD
Private Well			
Other: ____	Precipitation	6	MGD

B. Identify water discharged by the facility and treatment systems, and provide average flows. If water is first used for one purpose and then is subsequently used for another purpose, indicate the type and amount of the last use. For example, if water is initially used for noncontact cooling water and then for process water, indicate the amount of process water. The amount of water from sources should approximate the amount of water usage. If the amounts are different, provide an explanation.

	Average Flow Rate	Units		Average Flow Rate	Units
Process Wastewater	20.9	MGD	Sanitary Wastewater	50,000	GPD
Contact Cooling Water			Regulated Storm Water	4	MGD
Noncontact Cooling Water	1,501	MGD	High Pressure Test Water		
Groundwater Cleanup			Other: ____		

Note: For A. and B. above, indicate units as MGD (million gallons per day), MGY (million gallons per year), GPD (gallons per day), or other appropriate unit.

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

B. Outfall Information

Complete a separate Section III.B. – Outfall Information (Pages 19 – 24) for each outfall at the facility. Make copies of this blank section of the Application as necessary for additional outfalls.

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER	OUTFALL NUMBER
Monroe Power Plant	MI0001848	001

1. OUTFALL INFORMATION. Instructions for this item are on Page 3 of the Appendix.

A.	Receiving Water: Lake Erie				Hydrologic Unit Code: 04100002	
B.	County: Monroe				Township: Frenchtown	
C.	Town: T7S	Range: R9E	Section: 15	¼	¼, ¼	Private (French) Land Claim
D.	Latitude: 41.876399				Longitude: -83.352821	

E. Type of Wastewater Discharged (check all that apply to this outfall):

- ☐ Contact Cooling
- ☐ Groundwater Cleanup
- ☐ Hydrostatic Pressure Test
- ☒ Noncontact Cooling Water
- ☒ Process Wastewater
- ☐ Sanitary Wastewater
- ☒ Storm Water - not regulated
- ☒ Storm Water - regulated
- ☒ Storm water subject to effluent guidelines (indicate under which category): Steam Electric Power Generation
- ☒ Others (see Table 8 – Other Common Types of Wastewater on Page 17 in the Appendix) Demin. Regen. Water, Filter Backwash

F. The Maximum Design Flow Rate for this outfall is: 1,978 MGD

G. What is the Maximum Authorized Daily Discharge Flow for this outfall for the next five years?

Seasonal Dischargers _____ MGY (Continue with Item H.)

Continuous Dischargers 1,978 MGD (Continue with Item I.)

H. Seasonal Discharge:

List the discharge periods (by month) and the volume discharged in the space provided below.

From	Through	Actual Discharge Volume (MGD)	Annual Total
From	Through	Actual Discharge Volume (MGD)	
From	Through	Actual Discharge Volume (MGD)	
From	Through	Actual Discharge Volume (MGD)	

I. Continuous Discharge:

How often is there a discharge from this outfall (on average)? 24 Hours/Day 365 Days/Year

Batch dischargers are required to provide the following additional information:

Is there effluent flow equalization? ☐ Yes ☐ No

Batch Peak Flow Rate: _____ Number of batches discharged per day: _____

	Minimum	Average	Maximum
Batch Volume (gallons)			
Batch Duration (minutes)			

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

B. Outfall Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER	OUTFALL NUMBER
Monroe Power Plant	MI0001848	001

2. PROCESS STREAMS CONTRIBUTING TO OUTFALL DISCHARGE

Federal regulations require that different industries report different information, depending on the type of facility. The information below is used to determine the applicable federal regulations for this facility. An abbreviated list is on Page 11 in the 'Summary of Information to be reported by Industry Type' section of the Appendix. Applicants are required to provide the name and the SIC or the NAICS code for each process at the facility. Facilities with production-based limits must report an estimated annual production rate for the next five (5) years or the life of the permit. If the wastestream is not regulated under federal categorical standards, the applicant is required to report all pollutants which have the reasonable potential to be present in the discharge. To submit additional information, see Page ii, Item 3.

PROCESS INFORMATION

A. Name of the process contributing to the discharge: Non-contact Cooling Water

B. SIC or NAICS code: 4911

C. Describe the process and provide measures of production: Non-contact cooling water used for steam condensation and miscellaneous equipment cooling. Maximum discharge estimated at 1,932 MGD.

PROCESS INFORMATION

A. Name of the process contributing to the discharge: Bottom Ash Basin - Monitoring Point (MP) 001B

B. SIC or NAICS code: 4911

C. Describe the process and provide measures of production: Collects and treats bottom ash transport water, coal pile runoff, chemical and non-chemical metal cleaning wastes, treated flue gas desulfurization wastewater & pre-treatment system backwash, fly ash transport water, oily wastewater, low volume wastes and storm water runoff. Maximum discharge est. at 38.4 MGD.

PROCESS INFORMATION

A. Name of the process contributing to the discharge: Demineralization Regeneration - MP 001D

B. SIC or NAICS code: 4911

C. Describe the process and provide measures of production: Regeneration wastes from the plant's feedwater make-up demineralizers. Maximum discharge estimated at 1.5 MGD.

PROCESS INFORMATION

A. Name of the process contributing to the discharge: Fly Ash Transport Water - MP 001F

B. SIC or NAICS code: 4911

C. Describe the process and provide measures of production: Water used to transport fly ash to an on-site licensed monofill. Maximum discharge estimated at 19.4 MGD.

PROCESS INFORMATION

A. Name of the process contributing to the discharge: _____

B. SIC or NAICS code: _____

C. Describe the process and provide measures of production:

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

B. Outfall Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER	OUTFALL NUMBER
Monroe Power Plant	MI0001848	001

3. EFFLUENT CHARACTERISTICS - CONVENTIONAL POLLUTANTS. Instructions for this item are on Page 4 of the Appendix.

☒ Check this box if additional information is included as an attachment. To submit additional information, see Page ii, Item 3.

Please Note: Rule 323.1062 allows the use of either *Escherichia coli* or Fecal Coliform Bacteria as an indicator that effluent has been disinfected. The DEQ will use the indicator selected below in the permit issued based on this Application. ☐ Use *Escherichia coli* as an indicator of disinfection. ☐ Use Fecal Coliform Bacteria as an indicator of disinfection.

Submitted via DMRs or e-DMRs	Waiver Request and the Rationale Behind the Request	Parameter	Maximum Monthly Concentration	Maximum Daily Concentration	Units	Number of Analyses	Sample Type
☐		Biochemical Oxygen Demand – five day (BOD_5)			mg/l		☐ Grab ☐ 24-Hr Comp
☐		Chemical Oxygen Demand (COD)			mg/l		☐ Grab ☐ 24-Hr Comp
☐		Total Organic Carbon (TOC)			mg/l		☐ Grab ☐ 24-Hr Comp
☐		Ammonia Nitrogen (as N)			mg/l		☐ Grab ☐ 24-Hr Comp
☐		Total Suspended Solids			mg/l		☐ Grab ☐ 24-Hr Comp
☐	**Waiver Request Not Required**	Total Dissolved Solids			mg/l		☐ Grab ☐ 24-Hr Comp
☐	**Waiver Request Not Required**	Total Phosphorus (as P)			mg/l		☐ Grab ☐ 24-Hr Comp
☐	**Waiver Request Not Required**	Fecal Coliform Bacteria (report geometric means)		Maximum 7-day	counts/100ml		Grab
☐	**Waiver Request Not Required**	*Escherichia coli* (report geometric means)		Maximum 7-day	counts/100 ml		Grab
☒	**Waiver Request Not Required**	Total Residual Chlorine			☐ mg/l ☐ µg/l		Grab
☐	**Waiver Request Not Required**	Dissolved Oxygen	~~Do Not Use~~	Minimum Daily	mg/l		Grab
☒		pH (report maximum and minimum of individual samples)	Minimum	Maximum	standard units		Grab
☒		Temperature, Summer			☐ °F ☐ °C		Grab
☒		Temperature, Winter			☐ °F ☐ °C		Grab
☒	**Waiver Request Not Required**	Oil & Grease			mg/l		Grab

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

B. Outfall Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER	OUTFALL NUMBER
Monroe Power Plant	MI0001848	001

Note: For questions on this page, Tables 1 – 5 are found in the Appendix.

4. PRIMARY INDUSTRY PRIORITY POLLUTANT INFORMATION

Existing primary industries that discharge process wastewater are required to submit the results of at least one permittee-collected effluent analysis for selected organic pollutants identified in Table 2 (as determined from Table 1, Testing Requirements for Organic Toxic Pollutants by Industrial Category), and all of the pollutants identified in Table 3. Existing primary industries are required to also provide the results of at least one permittee-collected effluent analysis for any other chemical listed in Table 2 known or believed to be present in the facility's effluent.

In addition, submit the results of all other effluent analyses performed within the last three years for any chemical listed in Tables 2 and 3.

New primary industries that propose to discharge process wastewater are required to provide an estimated effluent concentration for any chemical listed in Tables 2 and 3 expected to be present in the facility's effluent.

5. DIOXIN AND FURAN CONGENER INFORMATION

Existing industries that use or manufacture 2,3,5-trichlorophenoxy acetic acid (2,4,5-T); 2-(2,3,5-trichlorophenoxy) propanoic acid, (Silvex, 2,3,5-TP); 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon), 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothionate (Ronnel); 2,4,5-trichlorophenol (TCP); or hexachlorophrene (HCP), or knows or has reason to believe that 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) is present in the facility's effluent, are required to submit the results of at least one effluent analysis for the dioxin and furan congeners listed in Table 6. All effluent analyses for dioxin and furan congeners shall be conducted using USEPA Method 1613.

In addition, submit the results of all other effluent analyses performed within the last three years for any dioxin and furan congener listed in Table 6.

New industries that expect to use or manufacture 2,3,5-trichlorophenoxy acetic acid (2,4,5-T); 2-(2,3,5-trichlorophenoxy) propanoic acid (Silvex, 2,3,5-TP), 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon); 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothionate (Ronnel); 2,4,5-trichlorophenol (TCP); or hexachlorophrene (HCP), or knows or has reason to believe that 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) is present in the facility's effluent, shall provide estimated effluent concentrations for the dioxin and furan congeners listed in Table 6.

6. OTHER INDUSTRY PRIORITY POLLUTANT INFORMATION

Existing secondary industries or existing primary industries that discharge nonprocess wastewater are required to submit the results of at least one effluent analysis for any chemical listed in Tables 2 and 3 known or believed to be present in the facility's effluent.

In addition, submit the results of all other effluent analyses performed within the last three years for any chemical listed in Tables 2 and 3.

New secondary industries or new primary industries that propose to discharge nonprocess wastewater are required to provide an estimated effluent concentration for any chemical listed in Tables 2 and 3 expected to be present in the facility's effluent.

7. ADDITIONAL TOXIC AND OTHER POLLUTANT INFORMATION

All existing industries, regardless of discharge type, are required to provide the results of at least one analysis for any chemical listed in Table 4 known or believed to be present in the facility's effluent, and a measured or estimated effluent concentration for any chemical listed in Table 5 known or believed to be present in the facility's effluent. In addition, submit the results of any effluent analysis performed within the last three years for any chemical listed in Tables 4 and 5.

New industries, regardless of discharge type, are required to provide an estimated effluent concentration for any chemical listed in Tables 4 and 5 expected to be present in the facility's effluent.

8. INJURIOUS CHEMICALS NOT PREVIOUSLY REPORTED

New or existing industries, regardless of discharge type, are required to provide a measured or estimated effluent concentration for any toxic or otherwise injurious chemicals known or believed to be present in the facility's effluent that have not been previously identified in this Application. Quantitative effluent data for these chemicals that is less than five years old shall be reported.

NOTE: All effluent data submitted in response to questions 4, 5, 6, 7, and 8 above should be recorded on Page 23. To submit additional information, see Page ii, Item 3. If the effluent concentrations are estimated, place an "E" in the "Analytical Method" column. The following fields shall be completed for each data row: Parameter, CAS No., Concentration(s), Sample Type, and Analytical Method. For analytical test requirements, see Page ii, Item 5. Tables 1, 2, and 3 can be found in the Appendix.

If Alternate Test Procedures have been approved for any parameter listed above (Items 4. through 8.), see Page ii, Item 5. for additional instructions.

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

B. Outfall Information

PLEASE TYPE OR PRINT

FACILITY NAME Monroe Power Plant	NPDES PERMIT NUMBER MI0001848	OUTFALL NUMBER 001

Submitted via DMRs or e-DMRs		SAMPLE DATE →						
	PARAMETER	CAS No.	Conc. (µg/l)	Conc. (µg/l)	Conc. (µg/l)	Conc. (µg/l)	Sample Type	Analytical Method
☐	See Attachment IV							
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Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

B. Outfall Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER	OUTFALL NUMBER
Monroe Power Plant	MI0001848	001

9. WATER TREATMENT ADDITIVES

Water treatment additives include any material that is added to water used at the facility or to wastewater generated by the facility to condition or treat the water.

Approvals of water treatment additives are authorized by the DEQ under separate correspondence. The issuance of an NPDES permit does not constitute approval of the water treatment additives that are included in this Application.

A. Are there water treatment additives in the discharge from this facility?

☒ Yes.

☐ No. Proceed to Item 10.

B. Have these water treatment additives been previously approved?

☒ Yes. Submit a list of the previously-approved water treatment additives and the date on which they were approved. The information listed in Item C., Items 1. – 8. shall be updated if it has changed since the previous approval. See Attachment VI

☐ No. Continue with Item C.

C. Submit a list of water treatment additives that are or may be discharged from the facility. Applicants are required to submit the information listed below for each additive.

1. The water treatment additive Material Safety Data Sheet
2. The proposed water treatment additive discharge concentration
3. The discharge frequency (i.e., number of hours per day, week)
4. The outfall from which the water treatment additive is to be discharged
5. The type of removal treatment, if any, that the water treatment additive receives prior to discharge
6. The water treatment additive function (i.e., microbiocide, flocculant)
7. A 48-hour LC50 or EC50 for a North American freshwater planktonic crustacean (either *Ceriodaphnia* sp., *Daphnia* sp., or *Simocephalus* sp.)
8. The results of a toxicity test for one other North American freshwater aquatic species (other than a planktonic crustacean) that meets a minimum requirement of Rule 323.1057(2)(a) of the Water Quality Standards. Examples of tests that would meet this requirement include a 96-hour LC50 for rainbow trout, bluegill, or fathead minnow.

The required toxicity information (described in Items 7. and 8. above) is currently available in the Water Resource Division's files for the water treatment additives listed on the DEQ's Internet page. To access that information, go to http://www.michigan.gov/deq, click on Site Map, at the bottom of the right column under **Water Quality Monitoring,** click on Assessment of Michigan Waters. Under the **Information** heading, click on the Water Treatment Additive List. If you intend to use one of the water treatment additives on this list, only the information in Items 1. through 6. above needs to be submitted to the Water Resources Division. **Note:** The availability of toxicity information for a water treatment additive does not constitute approval to discharge the water treatment additive. Comments:

10. WHOLE EFFLUENT TOXICITY (WET) TESTS

Have any acute or chronic WET tests been conducted on any discharges or receiving water(s) in relation to facility discharges within the last three (3) years? If yes, identify the tests and summarize the results on a separate sheet, unless the test has been submitted to the DEQ in the last three (3) years. For assistance with WET testing, see "Whole Effluent Toxicity Test Guidance and Requirements" on Page 17 in the Appendix. Comments:

This completes Section III. Return the completed Application (Sections I, III, IV, VI [if applicable], and any attachments) to one of the addresses on Page ii of this Application. If assistance is needed to complete this Application, contact the Permits Section.

Attachment VI

Outfall 001
DTE Electric Company: Monroe Power Plant - 2014
NPDES Permit Application No. MI0001848
Section III, Item 9 – Water Treatment Additives

The following Water Treatment Additives (WTA) were approved for use in the Monroe Power Plant flue gas desulfurization (FGD) system:

Chemical	Function	Monitoring Point	Discharge Concentration	Approval Date	Notes
ACUTREAT 4074	Polymer (cationic)	001A	3 ug/L	June 4, 2009	The request for these WTAs, dated 5/26/09, was for FGD operations.
ACUTREAT 4213	Clarifying Aid	001A	16 ug/L	June 4, 2009	
ACUTREAT 4533	Polymer (anionic)	001A	2 ug/l	June 4, 2009	
ACUMET 4150	Precipitant	001A	26 ug/L	June 4, 2009	
ACUMET 4150	Precipitant	001A	124.8 ng/L	March 13, 2014	The request for these WTAs, dated 2/27/14, was for a FGD pilot test.
ACUMET 4165	Precipitant	001A	164.2 ng/L	March 13, 2014	
ACUTREAT 258	Oxidizer/Neutralizer	001A	164.2 ng/L	March 13, 2014	
ACUTREAT 262	Precipitant	001A	273.7 ng/L	March 13, 2014	
ACUTREAT 4533	Flocculation	001A	63.0 ng/L	March 13, 2014	

The Company does not have record of a separate letter of approval for the WTAs listed below. However, previous NPDES permit renewal applications identified these WTAs:

Chemical	Function	Monitoring Point	Monitoring Method	Permit Limit
Chlorine	biocide	001A	TRC	38 ug/L Continuous
Chlorine	biocide	001A	TRC	200 ug/L Intermittment
Sodium Hydroxide	demineralizer regenerant	001A	pH	6.5 – 9.0
Sulfuric Acid	demineralizer regenerant	001A	pH	6.5 – 9.0

TRC = Total Residual Chlorine

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

B. Outfall Information

Complete a separate Section III.B. – Outfall Information (Pages 19 – 24) for each outfall at the facility. Make copies of this blank section of the Application as necessary for additional outfalls.

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER	OUTFALL NUMBER
Monroe Power Plant	MI0001848	002

1. OUTFALL INFORMATION. Instructions for this item are on Page 3 of the Appendix.

A.	Receiving Water: Lake Erie				Hydrologic Unit Code: 04100002	
B.	County: Monroe				Township: Frenchtown	
C.	Town: T7S	Range: R9E	Section: 15	¼	¼, ¼	Private (French) Land Claim
D.	Latitude: 41.885857				Longitude: -83.337935	

E. Type of Wastewater Discharged (check all that apply to this outfall):

☐ Contact Cooling ☐ Groundwater Cleanup ☐ Hydrostatic Pressure Test ☐ Noncontact Cooling Water

☐ Process Wastewater ☐ Sanitary Wastewater ☐ Storm Water - not regulated ☐ Storm Water - regulated

☐ Storm water subject to effluent guidelines (indicate under which category): Steam Electric Power Generation

☒ Others (see Table 8 – Other Common Types of Wastewater on Page 17 in the Appendix) Fish Transport System

F. The Maximum Design Flow Rate for this outfall is: 16.71 MGD

G What is the Maximum Authorized Daily Discharge Flow for this outfall for the next five years?

Seasonal Dischargers _____ MGY (Continue with Item H.)

Continuous Dischargers 16.71 MGD (Continue with Item I.)

H. Seasonal Discharge:

List the discharge periods (by month) and the volume discharged in the space provided below.

From	Through	Actual Discharge Volume (MGD)	Annual Total
From	Through	Actual Discharge Volume (MGD)	
From	Through	Actual Discharge Volume (MGD)	
From	Through	Actual Discharge Volume (MGD)	

I. Continuous Discharge:

How often is there a discharge from this outfall (on average)? 24 Hours/Day 365 Days/Year

Batch dischargers are required to provide the following additional information:

Is there effluent flow equalization? ☐ Yes ☐ No

Batch Peak Flow Rate: _____ Number of batches discharged per day: _____

	Minimum	Average	Maximum
Batch Volume (gallons)			
Batch Duration (minutes)			

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

B. Outfall Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER	OUTFALL NUMBER
Monroe Power Plant	MI0001848	002

2. PROCESS STREAMS CONTRIBUTING TO OUTFALL DISCHARGE

Federal regulations require that different industries report different information, depending on the type of facility. The information below is used to determine the applicable federal regulations for this facility. An abbreviated list is on Page 11 in the 'Summary of Information to be reported by Industry Type' section of the Appendix. Applicants are required to provide the name and the SIC or the NAICS code for each process at the facility. Facilities with production-based limits must report an estimated annual production rate for the next five (5) years or the life of the permit. If the wastestream is not regulated under federal categorical standards, the applicant is required to report all pollutants which have the reasonable potential to be present in the discharge. To submit additional information, see Page ii, Item 3.

PROCESS INFORMATION

A. Name of the process contributing to the discharge: Fish Transport System

B. SIC or NAICS code: 4911

C. Describe the process and provide measures of production: Collects storm water run off from the electrical mat and discharges to the River Raisin. Maximum amount of discharge is unspecified.

PROCESS INFORMATION

A. Name of the process contributing to the discharge: _____

B. SIC or NAICS code: _____

C. Describe the process and provide measures of production:

PROCESS INFORMATION

A. Name of the process contributing to the discharge: _____

B. SIC or NAICS code: _____

C. Describe the process and provide measures of production:

PROCESS INFORMATION

A. Name of the process contributing to the discharge: _____

B. SIC or NAICS code: _____

C. Describe the process and provide measures of production:

PROCESS INFORMATION

A. Name of the process contributing to the discharge: _____

B. SIC or NAICS code: _____

C. Describe the process and provide measures of production:

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

B. Outfall Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER	OUTFALL NUMBER
Monroe Power Plant	MI0001848	002

3. EFFLUENT CHARACTERISTICS - CONVENTIONAL POLLUTANTS. Instructions for this item are on Page 4 of the Appendix.

☒ Check this box if additional information is included as an attachment. To submit additional information, see Page ii, Item 3.

Please Note: Rule 323.1062 allows the use of either *Escherichia coli* or Fecal Coliform Bacteria as an indicator that effluent has been disinfected. The DEQ will use the indicator selected below in the permit issued based on this Application. ☐ Use *Escherichia coli* as an indicator of disinfection. ☐ Use Fecal Coliform Bacteria as an indicator of disinfection.

Submitted via DMRs or e-DMRs	Waiver Request and the Rationale Behind the Request	Parameter	Maximum Monthly Concentration	Maximum Daily Concentration	Units	Number of Analyses	Sample Type
☐	See Waiver Request -	Biochemical Oxygen Demand – five day (BOD_5)			mg/l		☐ Grab ☐ 24-Hr Comp
☐	Attachment VII	Chemical Oxygen Demand (COD)			mg/l		☐ Grab ☐ 24-Hr Comp
☐		Total Organic Carbon (TOC)			mg/l		☐ Grab ☐ 24-Hr Comp
☐		Ammonia Nitrogen (as N)			mg/l		☐ Grab ☐ 24-Hr Comp
☐		Total Suspended Solids			mg/l		☐ Grab ☐ 24-Hr Comp
☐	**Waiver Request Not Required**	Total Dissolved Solids			mg/l		☐ Grab ☐ 24-Hr Comp
☐	**Waiver Request Not Required**	Total Phosphorus (as P)			mg/l		☐ Grab ☐ 24-Hr Comp
☐	**Waiver Request Not Required**	Fecal Coliform Bacteria (report geometric means)		Maximum 7-day	counts/100ml		Grab
☐	**Waiver Request Not Required**	*Escherichia coli* (report geometric means)		Maximum 7-day	counts/100 ml		Grab
☐	**Waiver Request Not Required**	Total Residual Chlorine			☐ mg/l ☐ µg/l		Grab
☐	**Waiver Request Not Required**	Dissolved Oxygen	~~Do Not Use~~	Minimum Daily	mg/l		Grab
☐		pH (report maximum and minimum of individual samples)	Minimum	Maximum	standard units		Grab
☐		Temperature, Summer			☐ °F ☐ °C		Grab
☐		Temperature, Winter			☐ °F ☐ °C		Grab
☐	**Waiver Request Not Required**	Oil & Grease			mg/l		Grab

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

B. Outfall Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER	OUTFALL NUMBER
Monroe Power Plant	MI0001848	002

Note: For questions on this page, Tables 1 – 5 are found in the Appendix.

4. PRIMARY INDUSTRY PRIORITY POLLUTANT INFORMATION

Existing primary industries that discharge process wastewater are required to submit the results of at least one permittee-collected effluent analysis for selected organic pollutants identified in Table 2 (as determined from Table 1, Testing Requirements for Organic Toxic Pollutants by Industrial Category), and all of the pollutants identified in Table 3. Existing primary industries are required to also provide the results of at least one permittee-collected effluent analysis for any other chemical listed in Table 2 known or believed to be present in the facility's effluent.

In addition, submit the results of all other effluent analyses performed within the last three years for any chemical listed in Tables 2 and 3.

New primary industries that propose to discharge process wastewater are required to provide an estimated effluent concentration for any chemical listed in Tables 2 and 3 expected to be present in the facility's effluent.

5. DIOXIN AND FURAN CONGENER INFORMATION

Existing industries that use or manufacture 2,3,5-trichlorophenoxy acetic acid (2,4,5-T); 2-(2,3,5-trichlorophenoxy) propanoic acid, (Silvex, 2,3,5-TP); 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon); 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothionate (Ronnel); 2,4,5-trichlorophenol (TCP); or hexachlorophrene (HCP), or knows or has reason to believe that 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) is present in the facility's effluent, are required to submit the results of at least one effluent analysis for the dioxin and furan congeners listed in Table 6. All effluent analyses for dioxin and furan congeners shall be conducted using USEPA Method 1613.

In addition, submit the results of all other effluent analyses performed within the last three years for any dioxin and furan congener listed in Table 6.

New industries that expect to use or manufacture 2,3,5-trichlorophenoxy acetic acid (2,4,5-T); 2-(2,3,5-trichlorophenoxy) propanoic acid (Silvex, 2,3,5-TP); 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon); 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothionate (Ronnel); 2,4,5-trichlorophenol (TCP); or hexachlorophrene (HCP), or knows or has reason to believe that 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) is present in the facility's effluent, shall provide estimated effluent concentrations for the dioxin and furan congeners listed in Table 6.

6. OTHER INDUSTRY PRIORITY POLLUTANT INFORMATION

Existing secondary industries or existing primary industries that discharge nonprocess wastewater are required to submit the results of at least one effluent analysis for any chemical listed in Tables 2 and 3 known or believed to be present in the facility's effluent.

In addition, submit the results of all other effluent analyses performed within the last three years for any chemical listed in Tables 2 and 3.

New secondary industries or new primary industries that propose to discharge nonprocess wastewater are required to provide an estimated effluent concentration for any chemical listed in Tables 2 and 3 expected to be present in the facility's effluent.

7. ADDITIONAL TOXIC AND OTHER POLLUTANT INFORMATION

All existing industries, regardless of discharge type, are required to provide the results of at least one analysis for any chemical listed in Table 4 known or believed to be present in the facility's effluent, and a measured or estimated effluent concentration for any chemical listed in Table 5 known or believed to be present in the facility's effluent. In addition, submit the results of any effluent analysis performed within the last three years for any chemical listed in Tables 4 and 5.

New industries, regardless of discharge type, are required to provide an estimated effluent concentration for any chemical listed in Tables 4 and 5 expected to be present in the facility's effluent.

8. INJURIOUS CHEMICALS NOT PREVIOUSLY REPORTED

New or existing industries, regardless of discharge type, are required to provide a measured or estimated effluent concentration for any toxic or otherwise injurious chemicals known or believed to be present in the facility's effluent that have not been previously identified in this Application. Quantitative effluent data for these chemicals that is less than five years old shall be reported.

NOTE: All effluent data submitted in response to questions 4, 5, 6, 7, and 8 above should be recorded on Page 23. To submit additional information, see Page ii, Item 3. If the effluent concentrations are estimated, place an "E" in the "Analytical Method" column. The following fields shall be completed for each data row: Parameter, CAS No., Concentration(s), Sample Type, and Analytical Method. For analytical test requirements, see Page ii, Item 5. Tables 1, 2, and 3 can be found in the Appendix.

If Alternate Test Procedures have been approved for any parameter listed above (Items 4. through 8.), see Page ii, Item 5. for additional instructions.

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

B. Outfall Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER	OUTFALL NUMBER
Monroe Power Plant	MI0001848	002

Submitted via DMRs or e-DMRs	PARAMETER	CAS No.	Conc. (µg/l)	Conc. (µg/l)	Conc. (µg/l)	Conc. (µg/l)	Sample Type	Analytical Method
	SAMPLE DATE ➔							
☐	See Attachment VII							
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Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

B. Outfall Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER	OUTFALL NUMBER
Monroe Power Plant	MI0001848	002

9. WATER TREATMENT ADDITIVES

Water treatment additives include any material that is added to water used at the facility or to wastewater generated by the facility to condition or treat the water.

Approvals of water treatment additives are authorized by the DEQ under separate correspondence. The issuance of an NPDES permit does not constitute approval of the water treatment additives that are included in this Application.

A. Are there water treatment additives in the discharge from this facility?

☐ Yes.

☒ No. Proceed to Item 10.

B. Have these water treatment additives been previously approved?

☐ Yes. Submit a list of the previously-approved water treatment additives and the date on which they were approved. The information listed in Item C., Items 1. – 8. shall be updated if it has changed since the previous approval. See Attachment VI

☐ No. Continue with Item C.

C. Submit a list of water treatment additives that are or may be discharged from the facility. Applicants are required to submit the information listed below for each additive.

1. The water treatment additive Material Safety Data Sheet
2. The proposed water treatment additive discharge concentration
3. The discharge frequency (i.e., number of hours per day, week)
4. The outfall from which the water treatment additive is to be discharged
5. The type of removal treatment, if any, that the water treatment additive receives prior to discharge
6. The water treatment additive function (i.e., microbiocide, flocculant)
7. A 48-hour LC50 or EC50 for a North American freshwater planktonic crustacean (either *Ceriodaphnia* sp., *Daphnia* sp., or *Simocephalus* sp.)
8. The results of a toxicity test for one other North American freshwater aquatic species (other than a planktonic crustacean) that meets a minimum requirement of Rule 323.1057(2)(a) of the Water Quality Standards. Examples of tests that would meet this requirement include a 96-hour LC50 for rainbow trout, bluegill, or fathead minnow.

The required toxicity information (described in Items 7. and 8. above) is currently available in the Water Resource Division's files for the water treatment additives listed on the DEQ's Internet page. To access that information, go to http://www.michigan.gov/deq, click on Site Map, at the bottom of the right column under **Water Quality Monitoring,** click on Assessment of Michigan Waters. Under the **Information** heading, click on the Water Treatment Additive List. If you intend to use one of the water treatment additives on this list, only the information in Items 1. through 6. above needs to be submitted to the Water Resources Division. **Note:** The availability of toxicity information for a water treatment additive does not constitute approval to discharge the water treatment additive. Comments:

10. WHOLE EFFLUENT TOXICITY (WET) TESTS

Have any acute or chronic WET tests been conducted on any discharges or receiving water(s) in relation to facility discharges within the last three (3) years? If yes, identify the tests and summarize the results on a separate sheet, unless the test has been submitted to the DEQ in the last three (3) years. For assistance with WET testing, see "Whole Effluent Toxicity Test Guidance and Requirements" on Page 17 in the Appendix. Comments:

This completes Section III. Return the completed Application (Sections I, III, IV, VI [if applicable], and any attachments) to one of the addresses on Page ii of this Application. If assistance is needed to complete this Application, contact the Permits Section.

Attachment VII

Outfall 002
DTE Electric Company: Monroe Power Plant - 2014
NPDES Permit Application No. MI0001848
Section III, Item 3 – Effluent Characteristics

The Fish Transport System, which provides a by-pass around the plant for fish that collect in front of the plant's intake screens, is designed to pump untreated intake water from the intake screens to Lake Erie. There is no process wastewater or cooling water added to the discharge from the Fish Transport System.

The Company requests a waiver for all of the analytical data normally required by the application since there is no addition of pollutants to this discharge.

NOTE: The Fish Transport System is not currently operational.

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

B. Outfall Information

Complete a separate Section III.B. – Outfall Information (Pages 19 – 24) for each outfall at the facility. Make copies of this blank section of the Application as necessary for additional outfalls.

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER	OUTFALL NUMBER
Monroe Power Plant	MI0001848	003

1. OUTFALL INFORMATION. Instructions for this item are on Page 3 of the Appendix.

A.	Receiving Water: River Raisin				Hydrologic Unit Code: 04100002	
B.	County: Monroe				Township: Frenchtown	
C.	Town: T7S	Range: R9E	Section: 15	¼	¼, ¼	Private (French) Land Claim
D.	Latitude: 41.894211				Longitude: -83.345547	

E. Type of Wastewater Discharged (check all that apply to this outfall):

☐ Contact Cooling ☐ Groundwater Cleanup ☐ Hydrostatic Pressure Test ☐ Noncontact Cooling Water

☐ Process Wastewater ☐ Sanitary Wastewater ☒ Storm Water - not regulated ☐ Storm Water - regulated

☐ Storm water subject to effluent guidelines (indicate under which category): _____

☐ Others (see Table 8 – Other Common Types of Wastewater on Page 17 in the Appendix) _____

F. The Maximum Design Flow Rate for this outfall is: _____ MGD

G What is the Maximum Authorized Daily Discharge Flow for this outfall for the next five years?

Seasonal Dischargers _____ MGY (Continue with Item H.)

Continuous Dischargers _____ MGD (Continue with Item I.)

H. Seasonal Discharge:

List the discharge periods (by month) and the volume discharged in the space provided below.

From	Through	Actual Discharge Volume (MGD)	Annual Total
From	Through	Actual Discharge Volume (MGD)	
From	Through	Actual Discharge Volume (MGD)	
From	Through	Actual Discharge Volume (MGD)	

I. Continuous Discharge:

How often is there a discharge from this outfall (on average)? _____ Hours/Day _____ Days/Year

Batch dischargers are required to provide the following additional information:

Is there effluent flow equalization? ☐ Yes ☐ No

Batch Peak Flow Rate: _____ Number of batches discharged per day: _____

	Minimum	Average	Maximum
Batch Volume (gallons)			
Batch Duration (minutes)			

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

B. Outfall Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER	OUTFALL NUMBER
Monroe Power Plant	MI0001848	003

2. PROCESS STREAMS CONTRIBUTING TO OUTFALL DISCHARGE

Federal regulations require that different industries report different information, depending on the type of facility. The information below is used to determine the applicable federal regulations for this facility. An abbreviated list is on Page 11 in the 'Summary of Information to be reported by Industry Type' section of the Appendix. Applicants are required to provide the name and the SIC or the NAICS code for each process at the facility. Facilities with production-based limits must report an estimated annual production rate for the next five (5) years or the life of the permit. If the wastestream is not regulated under federal categorical standards, the applicant is required to report all pollutants which have the reasonable potential to be present in the discharge. To submit additional information, see Page ii, Item 3.

PROCESS INFORMATION

A. Name of the process contributing to the discharge: Storm Water Runoff

B. SIC or NAICS code: 22112

C. Describe the process and provide measures of production: Collects storm water run off from the electrical mat and discharges to the River Raisin. Maximum amount of discharge is unspecified.

PROCESS INFORMATION

A. Name of the process contributing to the discharge: _____

B. SIC or NAICS code: _____

C. Describe the process and provide measures of production:

PROCESS INFORMATION

A. Name of the process contributing to the discharge: _____

B. SIC or NAICS code: _____

C. Describe the process and provide measures of production:

PROCESS INFORMATION

A. Name of the process contributing to the discharge: _____

B. SIC or NAICS code: _____

C. Describe the process and provide measures of production:

PROCESS INFORMATION

A. Name of the process contributing to the discharge: _____

B. SIC or NAICS code: _____

C. Describe the process and provide measures of production:

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

B. Outfall Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER	OUTFALL NUMBER
Monroe Power Plant	MI0001848	003

3. EFFLUENT CHARACTERISTICS - CONVENTIONAL POLLUTANTS. Instructions for this item are on Page 4 of the Appendix.

☒ Check this box if additional information is included as an attachment. To submit additional information, see Page ii, Item 3.

Please Note: Rule 323.1062 allows the use of either *Escherichia coli* or Fecal Coliform Bacteria as an indicator that effluent has been disinfected. The DEQ will use the indicator selected below in the permit issued based on this Application. ☐ Use *Escherichia coli* as an indicator of disinfection. ☐ Use Fecal Coliform Bacteria as an indicator of disinfection.

Submitted via DMRs or e-DMRs	Waiver Request and the Rationale Behind the Request	Parameter	Maximum Monthly Concentration	Maximum Daily Concentration	Units	Number of Analyses	Sample Type
☐	See Waiver Request -	Biochemical Oxygen Demand – five day (BOD_5)			mg/l		☐ Grab ☐ 24-Hr Comp
☐	Attachment VIII	Chemical Oxygen Demand (COD)			mg/l		☐ Grab ☐ 24-Hr Comp
☐		Total Organic Carbon (TOC)			mg/l		☐ Grab ☐ 24-Hr Comp
☐		Ammonia Nitrogen (as N)			mg/l		☐ Grab ☐ 24-Hr Comp
☐		Total Suspended Solids			mg/l		☐ Grab ☐ 24-Hr Comp
☐	**Waiver Request Not Required**	Total Dissolved Solids			mg/l		☐ Grab ☐ 24-Hr Comp
☐	**Waiver Request Not Required**	Total Phosphorus (as P)			mg/l		☐ Grab ☐ 24-Hr Comp
☐	**Waiver Request Not Required**	Fecal Coliform Bacteria (report geometric means)		Maximum 7-day	counts/100ml		Grab
☐	**Waiver Request Not Required**	*Escherichia coli* (report geometric means)		Maximum 7-day	counts/100 ml		Grab
☐	**Waiver Request Not Required**	Total Residual Chlorine			☐ mg/l ☐ µg/l		Grab
☐	**Waiver Request Not Required**	Dissolved Oxygen	~~Do Not Use~~	Minimum Daily	mg/l		Grab
☐		pH (report maximum and minimum of individual samples)	Minimum	Maximum	standard units		Grab
☐		Temperature, Summer			☐ °F ☐ °C		Grab
☐		Temperature, Winter			☐ °F ☐ °C		Grab
☐	**Waiver Request Not Required**	Oil & Grease			mg/l		Grab

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

B. Outfall Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER	OUTFALL NUMBER
Monroe Power Plant	MI0001848	003

Note: For questions on this page, Tables 1 – 5 are found in the Appendix.

4. PRIMARY INDUSTRY PRIORITY POLLUTANT INFORMATION

Existing primary industries that discharge process wastewater are required to submit the results of at least one permittee-collected effluent analysis for selected organic pollutants identified in Table 2 (as determined from Table 1, Testing Requirements for Organic Toxic Pollutants by Industrial Category), and all of the pollutants identified in Table 3. Existing primary industries are required to also provide the results of at least one permittee-collected effluent analysis for any other chemical listed in Table 2 known or believed to be present in the facility's effluent.

In addition, submit the results of all other effluent analyses performed within the last three years for any chemical listed in Tables 2 and 3.

New primary industries that propose to discharge process wastewater are required to provide an estimated effluent concentration for any chemical listed in Tables 2 and 3 expected to be present in the facility's effluent.

5. DIOXIN AND FURAN CONGENER INFORMATION

Existing industries that use or manufacture 2,3,5-trichlorophenoxy acetic acid (2,4,5-T); 2-(2,3,5-trichlorophenoxy) propanoic acid, (Silvex, 2,3,5-TP); 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon); 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothionate (Ronnel); 2,4,5-trichlorophenol (TCP); or hexachlorophrene (HCP), or knows or has reason to believe that 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) is present in the facility's effluent, are required to submit the results of at least one effluent analysis for the dioxin and furan congeners listed in Table 6. All effluent analyses for dioxin and furan congeners shall be conducted using USEPA Method 1613.

In addition, submit the results of all other effluent analyses performed within the last three years for any dioxin and furan congener listed in Table 6.

New industries that expect to use or manufacture 2,3,5-trichlorophenoxy acetic acid (2,4,5-T); 2-(2,3,5-trichlorophenoxy) propanoic acid (Silvex, 2,3,5-TP), 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon); 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothionate (Ronnel); 2,4,5-trichlorophenol (TCP); or hexachlorophrene (HCP), or knows or has reason to believe that 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) is present in the facility's effluent, shall provide estimated effluent concentrations for the dioxin and furan congeners listed in Table 6.

6. OTHER INDUSTRY PRIORITY POLLUTANT INFORMATION

Existing secondary industries or existing primary industries that discharge nonprocess wastewater are required to submit the results of at least one effluent analysis for any chemical listed in Tables 2 and 3 known or believed to be present in the facility's effluent.

In addition, submit the results of all other effluent analyses performed within the last three years for any chemical listed in Tables 2 and 3.

New secondary industries or new primary industries that propose to discharge nonprocess wastewater are required to provide an estimated effluent concentration for any chemical listed in Tables 2 and 3 expected to be present in the facility's effluent.

7. ADDITIONAL TOXIC AND OTHER POLLUTANT INFORMATION

All existing industries, regardless of discharge type, are required to provide the results of at least one analysis for any chemical listed in Table 4 known or believed to be present in the facility's effluent, and a measured or estimated effluent concentration for any chemical listed in Table 5 known or believed to be present in the facility's effluent. In addition, submit the results of any effluent analysis performed within the last three years for any chemical listed in Tables 4 and 5.

New industries, regardless of discharge type, are required to provide an estimated effluent concentration for any chemical listed in Tables 4 and 5 expected to be present in the facility's effluent.

8. INJURIOUS CHEMICALS NOT PREVIOUSLY REPORTED

New or existing industries, regardless of discharge type, are required to provide a measured or estimated effluent concentration for any toxic or otherwise injurious chemicals known or believed to be present in the facility's effluent that have not been previously identified in this Application. Quantitative effluent data for these chemicals that is less than five years old shall be reported.

NOTE: All effluent data submitted in response to questions 4, 5, 6, 7, and 8 above should be recorded on Page 23. To submit additional information, see Page ii, Item 3. If the effluent concentrations are estimated, place an "E" in the "Analytical Method" column. The following fields shall be completed for each data row: Parameter, CAS No., Concentration(s), Sample Type, and Analytical Method. For analytical test requirements, see Page ii, Item 5. Tables 1, 2, and 3 can be found in the Appendix.

If Alternate Test Procedures have been approved for any parameter listed above (Items 4. through 8.), see Page ii, Item 5. for additional instructions.

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

B. Outfall Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER	OUTFALL NUMBER
Monroe Power Plant	MI0001848	003

Submitted via DMRs or e-DMRs	SAMPLE DATE →							
	PARAMETER	CAS No.	Conc (µg/l)	Conc. (µg/l)	Conc. (µg/l)	Conc. (µg/l)	Sample Type	Analytical Method
☐	See Attachment VIII							
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Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III – Industrial and Commercial Wastewater

B. Outfall Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER	OUTFALL NUMBER
Monroe Power Plant	MI0001848	003

9. WATER TREATMENT ADDITIVES

Water treatment additives include any material that is added to water used at the facility or to wastewater generated by the facility to condition or treat the water.

Approvals of water treatment additives are authorized by the DEQ under separate correspondence. The issuance of an NPDES permit does not constitute approval of the water treatment additives that are included in this Application.

A. Are there water treatment additives in the discharge from this facility?

☐ Yes.

☒ No. Proceed to Item 10.

B. Have these water treatment additives been previously approved?

☐ Yes. Submit a list of the previously-approved water treatment additives and the date on which they were approved. The information listed in Item C., Items 1. – 8. shall be updated if it has changed since the previous approval. See Attachment VI

☐ No. Continue with Item C.

C. Submit a list of water treatment additives that are or may be discharged from the facility. Applicants are required to submit the information listed below for each additive.

1. The water treatment additive Material Safety Data Sheet
2. The proposed water treatment additive discharge concentration
3. The discharge frequency (i.e., number of hours per day, week)
4. The outfall from which the water treatment additive is to be discharged
5. The type of removal treatment, if any, that the water treatment additive receives prior to discharge
6. The water treatment additive function (i.e., microbiocide, flocculant)
7. A 48-hour LC50 or EC50 for a North American freshwater planktonic crustacean (either *Ceriodaphnia* sp., *Daphnia* sp., or *Simocephalus* sp.)
8. The results of a toxicity test for one other North American freshwater aquatic species (other than a planktonic crustacean) that meets a minimum requirement of Rule 323.1057(2)(a) of the Water Quality Standards. Examples of tests that would meet this requirement include a 96-hour LC50 for rainbow trout, bluegill, or fathead minnow.

The required toxicity information (described in Items 7. and 8. above) is currently available in the Water Resource Division's files for the water treatment additives listed on the DEQ's Internet page. To access that information, go to http://www.michigan.gov/deq, click on Site Map, at the bottom of the right column under **Water Quality Monitoring,** click on Assessment of Michigan Waters. Under the **Information** heading, click on the Water Treatment Additive List. If you intend to use one of the water treatment additives on this list, only the information in Items 1. through 6. above needs to be submitted to the Water Resources Division. **Note:** The availability of toxicity information for a water treatment additive does not constitute approval to discharge the water treatment additive. Comments:

10. WHOLE EFFLUENT TOXICITY (WET) TESTS

Have any acute or chronic WET tests been conducted on any discharges or receiving water(s) in relation to facility discharges within the last three (3) years? If yes, identify the tests and summarize the results on a separate sheet, unless the test has been submitted to the DEQ in the last three (3) years. For assistance with WET testing, see "Whole Effluent Toxicity Test Guidance and Requirements" on Page 17 in the Appendix. Comments:

This completes Section III. Return the completed Application (Sections I, III, IV, VI [if applicable], and any attachments) to one of the addresses on Page ii of this Application. If assistance is needed to complete this Application, contact the Permits Section.

Attachment VIII

Outfall 003
DTE Electric Company: Monroe Power Plant - 2014
NPDES Permit Application No. MI0001848
Section III, Item 3 – Effluent Characteristics

Outfall 003 discharges an unspecified amount of storm water runoff from the electrical mat at MONPP. The existing NPDES permit allows discharge from Outfall 003, and the only required parameter is an outfall observation on a monthly basis during discharge. The Company believes that an outfall observation continues to be appropriate for the discharge, and that no other parameters are required. Therefore, the Company requests a waiver for all of the analytical data normally required by the application since there is no addition of pollutants from this discharge.

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION IV – Storm Water

PLEASE TYPE OR PRINT

FACILITY NAME	Monroe Power Plant	NPDES PERMIT NUMBER	MI0001848

1. STORM WATER DISCHARGES

Facilities must complete Section IV if they are engaged in a regulated "industrial activity" as defined in 40 CFR 122.26(b)(14). See the DEQ Industrial Storm Water website (http://www.michigan.gov/deqstormwater then click on Industrial Program) for a complete list of regulated industrial activities. **Complete the following questions:**

A. Is the storm water runoff from this facility discharged to the surface waters of the state either directly or through another conveyance (ie. municipal separate storm sewer system)? Note: If storm water is discharged to a municipal combined storm sewer system, a municipal wastewater treatment system, or a privately-owned activated sludge treatment system, check the "No" box.

☐ Yes. Continue to next question.

☒ No. **STOP: The rest of Section IV does not need to be completed. No storm water authorization required.**

B. Are there any industrial activities or materials exposed to storm water runoff at this facility? Storm water discharge requirements may be excluded from an NPDES Permit if there are no industrial activities or materials exposed to storm water runoff. To qualify, the applicant shall certify that the facility has met all the eligibility requirements to claim a condition of "no exposure." These requirements are found in the No Exposure Certification (NEC) Form in the Appendix or on the DEQ Industrial Storm Water website.

☐ Yes. Complete the remainder of Section IV.

☐ No. **STOP: The rest of Section IV does not need to be completed. Complete the NEC Form and submit it with this Application.**

C. Has the facility developed a SWPPP according to the requirements of the NPDES permit?

☐ Yes.

☐ No. **Note: The applicant must complete this program element to receive storm water discharge authorization.**

D. Has the facility performed an investigation to ensure there are no unauthorized discharges to the storm sewer system or the surface waters of the state?

☐ Yes.

☐ No. **Note: The applicant must complete this program element to receive storm water discharge authorization.**

E. Has the facility implemented the non-structural controls described in the SWPPP?

☐ Yes.

☐ No. **Note: The applicant must complete this program element to receive storm water discharge authorization.**

F. Have all the structural controls described in the SWPPP been constructed and put into operation?

☐ Yes.

☐ No. **Note: The applicant must complete this program element to receive storm water discharge authorization.**

G. Does this facility have a certified industrial storm water operator who has supervision over the facility's storm water treatment and control measures described in the SWPPP?

☐ Yes. ____ Storm Water Operator Name ____ Certification Number

☐ No. **Note: The applicant must complete this program element to receive storm water discharge authorization.**

H. Is storm water discharged to the surface waters of the state or a municipal separate storm sewer system from (SKIP to next question if none apply):

☐ Secondary containment structures that are required by state or federal law. On a separate page, provide a list of the materials that are stored in this area.

☐ Areas identified on Michigan's list of Sites of Environmental Contamination, pursuant to the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, Part 201 (formerly 307).

☐ A facility that the DEQ has determined that the storm water discharge is a significant contributor of pollutants to surface waters of the state.

I. The storm water from this facility discharges to the following receiving water(s): ____

Applicants should provide any sample data taken of the storm water discharge as an attachment. To submit additional information, see Page ii, Item 3. See Attachment IX for additional information.

Attachment IX

DTE Electric Company: Monroe Power Plant - 2014
NPDES Permit Application No. MI0001848
Section IV – Storm Water
Supplemental Information

Historically and currently the storm water at MONPP has, and is, treated through the NPDES system. Therefore, past and current NPDES permits do not include a Storm Water Pollution Prevention Plan (SWPPP). However, the fly ash basin will be converted to a dry monofill in the future to meet the proposed effluent limitation guidelines (ELG) under 40 CFR 423. Activity associated with the future monofill will require a SWPPP. The company is requesting inclusion of SWPPP requirements in the renewed NPDES permit to address this future activity.

Michigan Department of Environmental Quality – Water Resources Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION VI – Cooling Water Intake Structures

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT NUMBER
Monroe Power Plant	MI0001848

A. COOLING WATER INTAKE STRUCTURE

Section 316(b) of the Federal Act requires that the location, design, construction, and capacity of cooling water intake structures (CWIS) reflect the best technology available (BTA) for minimizing adverse environmental impacts [impingement mortality (IM) and entrainment (E)]. Any new or existing facility utilizing a cooling water intake structure shall submit information on the CWIS for review if (1) the design intake flow rate is greater than two million gallons per day and (2) the facility uses at least twenty-five percent of water withdrawn for cooling purposes.

For facilities meeting these conditions, the information that is required to be submitted depends on the facility. Indicate the status of the facility:

☐ **New Facility**. In accordance with the Final Rules promulgated by USEPA under 316(b), new facilities meeting these requirements shall submit information as specified in 40 CFR 122.21(r) and 40 CFR 125.86. Applicants for new facilities shall compile and submit this information as an attachment to this application form.

☒ **Existing Facility**. Although Final Rules have yet to be promulgated by USEPA for existing facilities that employ CWIS, these facilities still shall meet requirements under Section 316(b) of the Federal Act determined by the DEQ on a case-by-case, best professional judgment basis.

For existing facilities, the following is a partial list of technologies and control measures which, when used singularly or in combination, will be considered BTA and would meet the performance standards for minimization of IM and entrainment E. Whether a particular BTA meets the performance standards for IM, E, or both, is indicated in parenthesis for each BTA below.

- A closed-cycle recirculating system or a CWIS withdrawing intake water at a rate commensurate with a closed-cycle recirculating system (both IM and E).
- A maximum through-screen design intake velocity at the cooling water intake structure of 0.5 feet per second or less (IM only).
- Submerged cylindrical wedge-wire screens if the following conditions are met: the CWIS is located in a river or stream, sufficient ambient counter-currents exist to promote cleaning of the screen face, maximum through-screen design intake velocity is 0.5 feet/second or less, and the slot size is appropriate for the size of eggs, larvae, and juveniles of all fish and shellfish to be protected at the site (both IM and E).
- An industrial or commercial facility that has the CWIS located in a river or stream and the CWIS has a design intake flow equal to 5 percent or less of the mean annual flow of the river or stream (E only).
- Rotating screens with an automatic fish return system or similar system to increase the likelihood that fish impinged will be returned to the source water with minimal stress (IM only).
- Fish exclusion devices (IM only).

Applicants for existing facilities shall compile and submit all of the information requested below as an attachment to this application form:

1. Latitude and longitude in degrees, minutes, and seconds for each CWIS
2. The capacity utilization rate and explanation of the rate (if the facility is a power plant)
3. A flow distribution and water balance diagram that includes all sources of water to the facility, recirculating flows, discharges, and flow rates
4. The mean annual flow of the river or stream if the CWIS is located in a river or stream
5. A diagram and narrative description of the configuration and location of each of the CWIS in the waterbody (include trash rack and screen locations and sizes, debris removal systems {e.g., traveling screens and spray wash systems}, and other fish exclusion devices)
6. A narrative description of the operation of each of the CWIS (include intake flows {design and actual}, daily hours of operation, days of operation per year, seasonal changes in operation, debris removal system operations, and any changes in operation the facility has implemented to reduce intake flows or IM and E)
7. A narrative description of the operation of the cooling water system (describe its relationship to the CWIS, the proportion of the design intake flow that is used in the system, the number of days of the year the cooling water system is in operation, seasonal changes in the operation of the system, and any anticipated changes)
8. The calculation of the maximum design through-screen intake velocity (the applicant may also submit the maximum actual through-screen velocity)
9. A summary of any available data for IM and E (include data, estimates, or descriptions on the volume or number of fish removed by trash removal systems)

Note: If Final Rules are promulgated under 316(b) or the DEQ determines that existing technology and control measures are either insufficient to comply with BTA requirements or requires more evaluation, the applicant may be required to provide further information and/or conduct additional studies. This application may be considered administratively incomplete until that additional information is received. To submit additional information, see Page ii, Item 3. Comments: See the Characterization Report previously submitted in July 2008.